

RECEIVED  
CENTRAL FAX CENTER  
JUL 26 2007

Application No. 10/811,138

### REMARKS

Reexamination and reconsideration of this application is respectfully requested in light of the proposed amendments to the claims and the following remarks.

Claims 1-53 are pending in this application. No claims have been canceled and no new claims have been added. Claims 1-11 and 14-53 have been withdrawn from consideration due to a restriction requirement. It is proposed to amend claims 12 and 13 to overcome the rejections below. The amendments do not raise an issue of new matter and should not require further search and/or consideration because the scope of the claims has not changed that would require a new search. In light of the discussion below, it is respectfully requested that the proposed amendment be entered.

#### Written Description Requirement Rejection

Claims 12 and 13 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection is a new matter rejection. According to the Examiner, the Applicant does not have written support for the language "having at least 95% similarity to SEQ ID NO:3 under stringent conditions." To expedite prosecution, the language has been deleted thereby obviating the rejection. It is therefore requested that the rejection be reconsidered and withdrawn.

#### Lack of Enablement and Indefiniteness Rejections

Claims 12 and 13 stand rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling. While the Examiner found that the specification enabling for mutating position numbers 347 and 348 from AT to GG or TC or TT to produce the Y-to-W or Y-to-F amino acid

Application No. 10/811,138

mutation, the Examiner did not find enablement for "any polynucleotide that has '95% similarity to SEQ ID NO 3 under stringent conditions' and that encodes a protein that is 'cabable' of binding coelenterazine and oxygen and emitting light and that has a W or F at amino acid position 82 of SEQ ID NO: 4."

The Examiner further rejected claims 12 and 13 under 35 U.S.C. § 112, second paragraph, as being indefinite because the term "% similarity" in connection with a polynucleotide has "no clear meaning" in the Office. According to the Examiner, the Office recognizes and uses the term "% identity" or "% sequence identity" because the language "is clear and defines a sequence that can be searched."

In the absence of any rejection of the claims over prior art and to expedite prosecution to overcome the rejections under 35 U.S.C. § 112, it is proposed to amend claims 12 and 13 to recite that the nucleic acid has "at least 95% sequence identify" and to delete the term "capable." The deletion of the term necessitate changing the terms "encoding" to --encode-- and "binding" to --bind--. The amendments are not believed to be new matter and are supported in the specification at page 4, lines 27-30, page 8, lines 6-15 and page 17, line 24 to page 18, line 8. It is believed that the amendments to claims 12 and 13 obviate the rejections under 35 U.S.C. § 112, first and second paragraphs.

In response to Applicant's previous arguments regarding the lack of enablement rejection, the Examiner finds that there is insufficient guidance for a person skilled in the art to make the invention in that there is "[n]o structural information relative to SEQ ID NO: 3 or 4 provided, with or without experimental data ..." and "[N]o information is provided as to where and how

RECEIVED  
CENTRAL FAX CENTER

JUL 26 2007

Application No. 10/811,138

and to what extent one of skill in the art may mutate SEQ ID NO: 4 have a mutation at position 82 so that the desired structural and functional properties will be retained." Applicant respectfully disagrees. The Examiner has not explained how and why such information is necessary and how the absence of such information would require undue experimentation by a person skilled in the art. For all of the foregoing reasons, it is respectfully requested that the rejection of claims 12 and 13 under the first and second paragraphs of 35 U.S.C. § 112 be reconsidered and withdrawn..

#### Conclusion

It is submitted that the claims 12 and 13 as they are proposed to be amended satisfy the requirements of the first and second paragraphs of 35 U.S.C. § 112 and present patentable subject matter. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

If there are any outstanding issues that might be resolved by an interview or by an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. § 1.17 and due in

RECEIVED  
CENTRAL FAX CENTER  
JUL 26 2007

Application No. 10/811,138

connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY



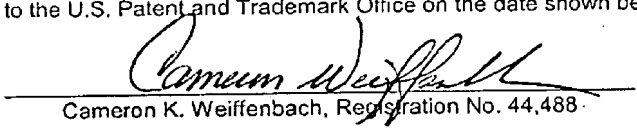
Cameron K. Weiffenbach  
Registration No. 44,488

**Please recognize our Customer No. 20277  
as our correspondence address.**

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 CKW:ckw  
Facsimile: 202.756.8087  
**Date: July 26, 2007**

#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper (including any paper referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.



Cameron K. Weiffenbach, Registration No. 44,488

Date: July 26, 2007